

**ABSTRACT**

The invention aims to provide a monitoring method that can measure an optical SNR in an ultra high speed optical transmission system with high accuracy, and an optical transmission system using the same. To this end, in the optical transmission system to which the monitoring method of the present invention is applied, the degree of polarization of an optical signal transmitted from an optical transmission apparatus to an optical receiving apparatus via an optical transmission path is measured by a DOP measuring device, and an optical SNR of the optical signal is determined by an optical SNR calculation circuit based on a measured value of the degree of polarization.